

**REQUEST FOR PROPOSALS**

**MARICOPA ASSOCIATION OF GOVERNMENTS  
PM-10 EFFICIENT STREET SWEEPER TEST**

**Maricopa Association of Governments  
January 9, 2001**

## CONTENTS

<b><u>Section</u></b>	<b><u>Page</u></b>
PUBLIC NOTICE	ii
SCOPE OF WORK	1
PROPOSAL REQUIREMENTS	10
ADMINISTRATIVE REQUIREMENTS	14
APPENDIX A:	ARIZONA ADMINISTRATIVE CODE R4-30-301
APPENDIX B:	LABOR COST ALLOCATION BUDGET
APPENDIX C:	PROPOSER'S REGISTRATION FORM
APPENDIX D:	PROGRESS REPORT FORMAT
APPENDIX E:	MAG'S KEY DBE REGULATORY REQUIREMENTS

## **PUBLIC NOTICE**

### **REQUEST FOR PROPOSALS**

#### **MAG PM-10 EFFICIENT STREET SWEEPER TEST**

The Maricopa Association of Governments (MAG) is requesting proposals from qualified consultants to evaluate the operational characteristics of South Coast Air Quality Management District Rule 1186-certified street sweepers and recommend how certified street sweepers may be incorporated into a municipal fleet in the Maricopa County PM-10 nonattainment area. The estimated time frame for this project is six months from the date of the notice to proceed and the cost is not to exceed \$70,000.

Detailed proposal requirements may be obtained by contacting the MAG Office at the address indicated below or by visiting the MAG web site at [www.mag.maricopa.gov/Newpages/About.htm](http://www.mag.maricopa.gov/Newpages/About.htm). For further information, please contact Doug Collins or Dean Giles at (602) 254-6300 or email to [dcollins@mag.maricopa.gov](mailto:dcollins@mag.maricopa.gov) or [dgiles@mag.maricopa.gov](mailto:dgiles@mag.maricopa.gov).

Proposals will be accepted until 12:00 noon (Mountain Standard Time) on Wednesday, January 31, 2001, at MAG, 302 North 1<sup>st</sup> Avenue, Suite 300, Phoenix, Arizona 85003.

## **SCOPE OF WORK**

### **INTRODUCTION**

The Maricopa Association of Governments (MAG) is requesting proposals from qualified consultants to evaluate street sweepers certified in accordance with South Coast Air Quality Management District (South Coast) Rule 1186 to specific conditions in the Maricopa County PM-10 Nonattainment Area. To ensure an independent evaluation, it is important that the qualified consultants not be employed under contract or in other business arrangements involving the manufacture, marketing, or sale of street sweepers. The objectives of this study are to: (1) evaluate the operational characteristics of certified and noncertified street sweepers; (2) conduct street sweeper field tests in a ‘sweep-off’ format for Rule 1186-certified street sweepers in the Maricopa County PM-10 Nonattainment Area; and, (3) provide recommendations for incorporating certified street sweepers into municipal fleets based on a comparative analysis of data obtained from an evaluation of operational characteristics and results from the field test. Each objective is discussed in detail below.

The CONSULTANT will evaluate the operational characteristics of certified and noncertified street sweepers using information derived from literature reviews, interviews (for certified sweepers only) and manufacturer specifications. The information will include operational characteristics such as transport speeds, sweeping speeds, water usage and disposal (if applicable), debris bin capacity and unloading procedures, and production rates. Life-cycle costs will be collected including capital investment, reliability, operating and maintenance requirements (replacement and component costs), mean time between failures, and warranty information. Safety issues, training requirements, and any other pertinent information such as alternative fuel use will be included in the research. In addition, the CONSULTANT will summarize the South Coast certification test results to date.

The CONSULTANT will conduct interviews with municipal public works departments in the Maricopa County PM-10 nonattainment area, and outside of the Maricopa County PM-10 nonattainment area where Rule 1186-certified street sweepers are being used. The CONSULTANT will collect information on how public works departments are incorporating certified street sweepers into their fleets, what operational problems have been or are expected to be encountered, and any operational policies, procedures or techniques used to address those problems. Interviews will also address the type of information public works departments would find useful in survey reporting forms or annual surveys.

The CONSULTANT will conduct a street sweeper field test in a ‘sweep-off’ format for Rule 1186-certified street sweepers in the Maricopa County PM-10 nonattainment area. The ‘sweep-off’ will include the maximum number of certified street sweepers possible. The ‘sweep-off’ will assess the ability of the certified street sweepers to reduce the silt loading for surfaces under a variety of conditions and loadings. The silt loading reduction will be assessed by a qualitative analysis resulting from visual inspection of the treated surfaces. To the extent possible, the CONSULTANT will simulate municipal street sweeping conditions in the PM-10 nonattainment area to address operational characteristics and silt loading reductions for various roadway designs and pavement

types. Large debris removal will also be assessed by a qualitative analysis resulting from visual inspection of surfaces treated with large debris.

The CONSULTANT will develop survey instruments to aid in the collection of sweeper information addressed in the proposal. The surveys should be designed to be used as a tool to compare information collected on the different sweepers during this project, and for use in collecting additional certified street sweeper information after the test is completed, and as part of an annual information update procedure.

For the Final Report, the CONSULTANT will include a comparative analysis of certified and noncertified street sweepers in both a narrative and matrix format evaluating the operational characteristics of certified street sweepers and recommending how certified street sweepers may be incorporated into a municipal fleet. This comparative analysis will utilize the manufacturer specifications, information obtained from municipal public works department interviews, the South Coast certification tests, and results of the field test in the nonattainment area.

## **BACKGROUND**

Wind storms, geologic material tracked out from construction sites, vehicle exhaust, and tire and brake wear are sources of particulate matter deposited on paved roads. Vehicular travel contributes to the breakdown of sand and other materials deposited on the roadway into finer particles. This particulate matter is reentrained into the air by vehicles traveling on paved roads. The most common method of removing particulate matter from paved roads is through the use of street sweepers. However, some street sweepers are not effective in removing particulate matter. In fact, sweepers may reentrain particulate matter during the sweeping process.

The National Ambient Air Quality Standards (NAAQS) for PM-10 have been established by the Environmental Protection Agency (EPA) to protect public health. As part of an effort to attain the NAAQS for PM-10, the South Coast Air Quality Management District promulgated Rule 1186. This South Coast Rule requires that Rule 1186-certified street sweepers must be purchased, leased, or contracted to replace retired equipment after January 1, 2000. Unlike noncertified sweepers, certified units are designed to minimize the production of airborne particulates during the sweeping process.

In accordance with Rule 1186, South Coast established a test protocol to be used to certify street sweepers. A number of sweepers have been tested and South Coast maintains a list of models which have passed the test protocol and are certified. As part of the Revised MAG 1999 Serious Area Particulate Plan for PM-10 for the Maricopa County Nonattainment Area, MAG has committed to conduct a local field test of the sweepers certified by South Coast. The MAG 'sweep-off' will evaluate only those models which are on the South Coast certification list at the time proposals are submitted. The MAG 'sweep-off' will include the maximum number of certified sweepers possible. Results of the South Coast certification tests will be utilized in this study to the extent they are applicable to this region.

In 1999, the South Coast Air Quality Management District published a list of certified sweepers, and since that time several jurisdictions in the Maricopa County Nonattainment Area have purchased certified sweepers. In addition, Congestion Mitigation and Air Quality (CMAQ) funds have been allocated for the purchase of certified sweepers for the fiscal years 2001 through 2006. The CMAQ funding should assist in the purchase of approximately eight new certified sweepers for each year indicated. Delivery of FY 2001 CMAQ funded street sweepers should be in the spring of 2001. The CMAQ sweeper funds are allocated through competing proposals that are prioritized on an annual basis.

## **PROPOSED TASKS**

The purpose of this section is to outline the major tasks to be performed by the CONSULTANT in order to produce the required analyses and deliverables. The CONSULTANT should develop a sound analytical approach that achieves the objectives for this project. It is recommended that the CONSULTANT be as specific as possible in describing the activities that will be performed to support each task. In preparing a proposal for consideration by MAG, the CONSULTANT is encouraged to be innovative in responding to task requirements. The CONSULTANT should also make maximum use of charts, tables, and drawings in working papers prepared for the project.

### **TASK 1: REFINE WORK SCOPE**

Throughout the course of this project, inquiry and discussion may result in some revisions to the Scope of Work and Project Schedule. As necessary, the CONSULTANT will refine the Scope of Work for this project based upon professional experience and input from MAG. This work will be performed under the general direction of the MAG project manager. The CONSULTANT will prepare documentation of any such revision, including a revised labor/dollar allocation and project task cost breakdown, and submit the revision to MAG for approval.

### **TASK 2: ASSEMBLE AND SUMMARIZE INFORMATION ON STREET SWEEPERS**

The CONSULTANT will develop one or more survey instruments to aid in the collection of sweeper information addressed in Task 2 and Task 4. The surveys should be designed as a tool to collect and compare information on the different sweepers during this project, for use in collecting additional information after the test is completed, and for use in an annual information update procedure. The survey instruments will be submitted to MAG for review and comment prior to use in either Task 2 or Task 4.

The CONSULTANT will assemble and summarize information on certified and noncertified sweepers collected from literature reviews, interviews (for certified street sweepers) and manufacturer specifications. Information will be collected on operational characteristics, life-cycle costs, safety features, training, and potential uses of certified sweepers in a municipal fleet. The operational characteristics will include, but are not be limited to, transport speeds, sweeping speeds, water usage and disposal (if applicable), debris bin capacity and unloading procedures, production rates, turning radius, sweeping

width, and sweeping ranges. Life-cycle costs will include, but are not be limited to, capital investment, reliability, operating and maintenance requirements (replacement and component costs), mean time between failures, and warranty information. Safety issues including cab ergonomics, training requirements and any other pertinent information such as alternative fuel use, visible opacity (dust), and availability of certified conversion kits will be included in the research.

The CONSULTANT will contact municipal public works departments which use street sweepers to obtain information on the operation of certified sweepers. This evaluation include interviews with the public works departments in the Maricopa County PM-10 nonattainment area, and will include an inventory of all the certified street sweepers currently in use in the nonattainment area. Additional interviews will be conducted with public works departments outside of the Maricopa County PM-10 nonattainment area where PM-10 certified street sweepers are being used.

The CONSULTANT will collect information on how public works departments are incorporating certified street sweepers into their fleets, what operational problems have been or are expected to be encountered, and any operational policies, procedures or techniques used to address those problems. Interviews will also address the type of information public works departments would find useful in survey reporting forms or annual surveys, and recommendations on how to implement an annual sweeper information update to address the performance of existing sweepers, any sweepers that are new to the nonattainment area, or any sweepers to be certified by the South Coast in the future. The CONSULTANT will also summarize the final South Coast Rule 1186 test results for models that were tested.

The CONSULTANT will prepare draft Working Paper #1 which will summarize the assembled information on certified and noncertified sweepers. The discussion will provide the potential users (local jurisdictions) with information on the operational characteristics which will be useful in selecting models for local use.

The results of the interviews of current users will also be summarized in draft Working Paper #1. The results of the South Coast testing will be included. The purpose of this first paper will be to present facts and anecdotal evidence about certified and noncertified sweepers, including the South Coast test results, to assist the local jurisdictions in evaluating the relative strengths and weaknesses of the street sweepers.

### **TASK 3: DEVELOP TESTING PROCEDURES**

The CONSULTANT will design ‘sweep-off’ procedures that will simulate municipal street sweeping conditions in the PM-10 nonattainment area. The procedures will identify the specific South Coast Rule 1186-certified sweeper models to be included in the ‘sweep-off’. It is important to note that it is the responsibility of the CONSULTANT to contact the manufacturers or distributors of the certified sweepers and local municipalities to obtain certified sweepers to be included in the ‘sweep-off’. At a

minimum, the ‘sweep-off’ should include the units representing different major classes of sweepers. The ‘sweep-off’ to be conducted by the CONSULTANT will include the maximum number of certified sweepers possible.

The ‘sweep-off’ procedures will not need to quantify the particulate emissions produced by the certified sweepers. Rather, the procedures for this study will focus on evaluating the following:

- Observed operational characteristics such as transport speeds, sweeping speeds, water usage and disposal (if applicable), debris bin capacity and unloading procedures, production rates, and visible opacity (dust);
- Qualitative analysis of silt loading reductions resulting from visual inspection of surfaces treated with low, medium, and high silt loadings, and with dry and wet silts. To the extent possible an evaluation will be made of silt loading reductions on alternative roadway designs such as curb and gutter, curb returns, paved shoulder, unpaved shoulder, speed bumps, and pavement types; and,
- Qualitative analysis of large debris removal resulting from visual inspection of surfaces treated with large debris.

In addition, the CONSULTANT will identify a suitable location(s) in the PM-10 nonattainment area to conduct the sweeper ‘sweep-off’. The location(s) of the ‘sweep-off’ will reflect conditions representative of the area for silt loadings and roadway design. The ‘sweep-off’ will be conducted in a high PM-10 concentration area where a significant source of particulate emissions is by vehicle reentrainment. The ‘sweep-off’ test procedures will include provisions for the use of video tape or other visual recording equipment to record the field tests.

The CONSULTANT will develop a survey instrument, to be used by the ‘sweep-off’ participants, to collect information on operational characteristics, silt loading reductions, and large debris pick-up efficiency, and to record general observations during the ‘sweep-off’. The survey should be designed to be used as a tool to compare information collected on the different sweepers during the ‘sweep-off’. The survey instruments will be submitted to MAG for review and comment prior to use in Task 4.

The CONSULTANT will prepare draft Working Paper #2 which will describe the draft ‘sweep-off’ procedures developed by the CONSULTANT for this study. Working Paper #2 will, at a minimum, include the following information:

- A detailed discussion of the technical aspects of the ‘sweep-off’ procedures, including identification of certified sweepers to be tested;
- An explanation of how the ‘sweep-off’ procedures address conditions specific to the PM-10 nonattainment area;
- The potential ‘sweep-off’ sites which were considered;



- The strengths and weaknesses of each site with regard to use in this study;
- Detailed information about the recommended site(s), including a site map and availability; and
- A draft of the survey instrument to be used during the ‘sweep-off’.

The CONSULTANT will conduct a workshop on the draft ‘sweep-off’ procedures at the MAG office for those involved in the street sweeping process (e.g., sweeper manufacturers, local jurisdictions, and MAG). At the first workshop the CONSULTANT will provide an overview of information from Task 2 and summarize the draft ‘sweep-off’ procedures for the participants, making effective use of slides and handouts. The workshop will be designed to allow participants to express concerns and offer suggestions on the ‘sweep-off’ process and sites before the procedures are finalized. Comments received during the workshop will be incorporated into the final version of Working Paper #2, which will be used in Task 4.

#### **TASK 4: CONDUCT ‘SWEEP-OFF’**

The CONSULTANT will conduct a street sweeper field test in a ‘sweep-off’ format for Rule 1186-certified street sweepers in the Maricopa County PM-10 nonattainment area. In accordance with Task 3, the CONSULTANT will contact the manufacturers or distributors of the certified sweepers and local municipalities to obtain the maximum number of certified sweepers possible to be tested as a part of this task. The total number of sweepers included in the ‘sweep-off’ will be a function of the number of certified sweepers available. Please note that for budgeting purposes, candidates for this contract should provide MAG with ‘sweep-off’ cost estimates per sweeper. The CONSULTANT will conduct the ‘sweep-off’, open to observation by the participants, in a location identified in the ‘sweep-off’ procedures. The CONSULTANT will utilize the survey instrument to collect sweeper information in the ‘sweep-off’.

The CONSULTANT will examine the certified sweepers to ensure that they conform to the manufacturer specifications as certified by South Coast. The CONSULTANT will conduct the ‘sweep-off’ on each certified model that is available. The ‘sweep-off’ will be conducted consistent with the procedures finalized in Task 3. It is important to note that if any difficulties are encountered during the ‘sweep-off’, it will be the responsibility of the CONSULTANT to adjust the procedure and/or location to achieve the objectives of this task.

At the conclusion of the ‘sweep-off’, the CONSULTANT will prepare draft Working Paper #3, which will present the results of the ‘sweep-off’ including, at a minimum, the following information:

- Observed operational characteristics such as transport speeds, sweeping speeds, water usage and disposal (if applicable), debris bin capacity and unloading procedures, and production rates;

- Qualitative analysis of silt loading reductions resulting from visual inspection of surfaces treated with low, medium, and high silt loadings, and with dry and wet silts. To the extent possible an evaluation will be made of silt loading reductions on alternative roadway designs such as curb and gutter, curb returns, paved shoulder, unpaved shoulder, and pavement types;
- Qualitative analysis of large debris removal resulting from visual inspection of surfaces treated with large debris;
- Any operational difficulties experienced during the ‘sweep-off’;
- Any information that would aid local jurisdictions in choosing the appropriate sweeper model, not uncovered in the research performed in Task 2; and
- A summary of the information collected from the field test surveys.

The CONSULTANT will conduct a second workshop at the MAG office for those involved in the street sweeping process (e.g., sweeper manufacturers, local jurisdictions, and MAG). The workshop will focus primarily on the results of the ‘sweep-off’. The CONSULTANT will summarize the results of the ‘sweep-off’ for the participants, making effective use of slides and handouts. It is also recommended that the operator(s) of the sweepers be available for questions from participants. Comments received during the workshop will be incorporated into the final version of Working Paper #3.

## **TASK 5: PREPARE FINAL REPORT**

The CONSULTANT will prepare a draft Final Report and Executive Summary. The draft Final Report will be based primarily on Working Papers #1 and #3, with brief summaries of Working Paper #2 and the surveys. It is anticipated that Working Paper #2 and the surveys will be incorporated in the Final Report as Appendices.

The Final Report will include a comparative analysis of certified and noncertified street sweepers in both a narrative and matrix format. This analysis will utilize the manufacturer specifications, information obtained from municipal public works department interviews, the South Coast certification tests, and results of the field test ‘sweep-off’ conducted in the nonattainment area, including the video portion of the ‘sweep-off’. Certified and noncertified sweepers will be compared with respect to the following:

- Operational characteristics such as transport speeds, sweeping speeds, water usage and disposal (if applicable), debris bin capacity and unloading procedures, and production rates;
- Qualitative analysis of silt loading reductions resulting from visual inspection of surfaces treated with low, medium, and high silt loadings, and with dry and wet silts. To the extent possible an evaluation will be made of silt loading reductions on alternative

- roadway designs such as curb and gutter, curb returns, paved shoulder, unpaved shoulder, and pavement types;
- Qualitative analysis of large debris removal resulting from visual inspection of surfaces treated with large debris;
- Life-cycle costs including capital investment, reliability, operating and maintenance requirements (replacement and component costs), mean time between failures, warranty information, safety issues, training requirements; and,
- Any other pertinent information such as alternative fuel use.

In the draft Final Report, the CONSULTANT will evaluate the operational characteristics of street sweepers (certified and noncertified), and the information collected from the interviews on how other public work departments incorporated certified street sweepers into their fleets, and recommend how certified sweepers may be used most effectively in municipal fleets in the PM-10 nonattainment area. The CONSULTANT will also make a recommendation on how to effectively use the survey instruments to annually update information on certified street sweepers.

The CONSULTANT will submit one camera-ready original and twenty copies of the Final Report with Executive Summary to MAG. The final document must be also submitted in electronic format compatible with WordPerfect Version 7 on 3 ½ inch high-density floppy diskette or compact disk as well as a portable document format (.pdf) file for the MAG website. The CONSULTANT will also furnish MAG with copies of the graphics presented to the MAG Management Committee and the MAG Regional Council.

## **DELIVERABLES**

The principal work products of this test are the three working papers, two workshops, video tape, and the Final Report. In preparing the working papers, it is expected that the CONSULTANT will first provide five copies of the initial draft document to MAG for internal review. The CONSULTANT will incorporate comments from the internal review into a revised working paper and submit twenty copies for external review within two weeks of receiving MAG comments. The CONSULTANT will then address or incorporate all comments resulting from the external review and submit five copies of the final working paper to MAG. The CONSULTANT will also allow for up to six one-day meetings in Phoenix. In addition to the two workshops, there may be one meeting each for the Air Quality Technical Advisory Committee, MAG Management Committee, and the MAG Regional Council.

The CONSULTANT shall provide draft copies of the Task 2 overview, survey instruments, and ‘sweep-off’ procedures to be covered at the first workshop one week before the first workshop to allow participants time to review the materials prior to the workshop. The CONSULTANT will provide to MAG a draft copy of all materials to be presented at the workshops and meetings for review and comment at least one day prior to the scheduled meeting. Comments received from MAG will be incorporated into the presentation materials prior to the presentation. The

CONSULTANT will provide MAG with paper copies of all materials (e.g. slide shows) presented at the workshops and meetings. Slide presentations for the workshops and meetings should be prepared in Microsoft PowerPoint or Corel Presentations format.

All work products created during the course of this project become the property of MAG. Work products include, but are not limited to, written reports, graphic presentations, spreadsheets, databases, data files, computer programs, video tape, and support documentation.

## **PROPOSAL REQUIREMENTS**

### **Project Cost and Schedule**

The estimated time frame for this project is six months from the date of the notice to proceed and the project cost is not to exceed \$70,000. The date of the notice to proceed is anticipated to be March 1, 2001. The Final Report shall be submitted six months from the date of the notice to proceed, with intermediate deliverables due in accordance with the schedule as agreed to between MAG and the CONSULTANT(s).

### **Proposal Delivery**

1. Twenty copies of the proposal must be submitted by 12:00 noon (Mountain Standard Time) on January 31, 2001 to:

Maricopa Association of Governments  
Attention: Doug Collins  
302 North 1<sup>st</sup> Avenue, Third Floor  
Phoenix, Arizona 85003

Timely receipt of proposals will be determined by the date and time the proposal is received at the above address. No late submissions or facsimile or electronic submissions will be accepted. Therefore, hand delivery is encouraged to assure timely receipt.

All material submitted in response to this solicitation becomes the property of MAG and will not be returned.

2. Any questions regarding this Request for Proposals should be directed to the attention of Doug Collins or Dean Giles at MAG, 302 North 1<sup>st</sup> Avenue, Suite 300, Phoenix, Arizona 85003, or by telephone at (602) 254-6300. The MAG fax number is (602) 254-6490 and questions can be posed electronically to [dcollins@mag.maricopa.gov](mailto:dcollins@mag.maricopa.gov) or [dgiles@mag.maricopa.gov](mailto:dgiles@mag.maricopa.gov).

### **Proposal Content**

It is required that the proposal:

1. Be limited to a maximum of 30 pages, including cover letter, resumes, and appendices.
2. Be prefaced by a brief statement describing the proposer's organization and outlining its approach to completing the work required by this solicitation. This statement shall illustrate the proposer's overall understanding of the project.
3. Contain a work plan which concisely explains how the CONSULTANT will carry out the objectives of the project. In the work plan, the proposer shall describe each project task and proposed approach to the task as clearly and thoroughly as possible.

4. Include a preliminary schedule for the project in bar-chart format. Indicate all work plan tasks and their durations. The schedule shall clearly identify project deliverable dates.
5. Contain a staffing plan for the project. The plan shall include the following in table format:
  - a. A project organization chart, identifying the project manager.
  - b. Names of key project team members and/or subconsultants. Only those personnel who will be working directly on the project should be cited.
  - c. The role and responsibility of each team member.
  - d. Percent effort (time) of each team member for the contract period.
  - e. The role and level of MAG technical staff support, if any.
6. The Disadvantaged Business Enterprise (DBE) participation goal for this proposal is 11 percent. DBEs proposed are required to be certified by ADOT or the City of Phoenix. Each proposal shall include the following information to meet the DBE requirements:
  - a. A clear and concise description of the work that each DBE will perform; and
  - b. The dollar amount of the participation of each DBE firm participating; or
  - c. If the 11 percent goal is not met, evidence of good faith efforts to meet the goal.
7. Include résumés for major staff members assigned to the project. These résumés should focus on their experience in this type of project.
8. Each firm submitting a proposal is required to certify that it will comply with, in all respects, the rules of professional conduct set forth in A.C.R.R. R4-30-301 (see Appendix A), which is the official compilation of Administrative Rules and Regulations for the State of Arizona.
9. Include proposer's recent experience (last five years) in performing work similar to that anticipated herein. This description shall include the following:
  - a. Date of project.
  - b. Name and address of client organization.
  - c. Name and telephone number of individual in the client organization who is familiar with the project.
  - d. Short description of project.

- e. CONSULTANT team members involved and their roles.
10. A labor cost allocation budget formatted as noted in Appendix B.
  11. All firms proposing on this project will be required to include a “*Proposer’s Registration Form*” (See Appendix C) in the submitted proposal. In addition, a “*Proposer’s Registration Form*” is required to be included for each subcontractor proposed for this project.
  12. Each firm shall document within its proposal any potential conflicts of interest. A conflict of interest shall be cause for disqualifying a CONSULTANT from consideration. A potential conflict of interest includes, but is not limited to:
    - a. Accepting an assignment where duty to the client would conflict with the CONSULTANT’S personal interest, or interest of another client.
    - b. Performing work for a client or having an interest which conflicts with this contract.
    - c. Employing personnel who worked for MAG or one of its member agencies within the past three years.
    - d. Performing work under contract or other business arrangements involving the manufacture, marketing, or sale of street sweepers.

MAG will be the final determining body as to whether a conflict of interest exists.

### **Proposal Evaluation and Selection Process**

1. All proposals will be evaluated by an evaluation group. Evaluation criteria include, but are not limited to:
  - a. Demonstrated understanding of the project through a well-defined work plan consistent with program objectives.
  - b. Clarity of proposal, realistic approach, technical soundness, and enhancements to elements outlined in this Request for Proposals.
  - c. Experience of Project Manager and other project personnel in similar studies. Only those personnel assigned to work directly on the project should be cited.
  - d. Proven track record in this area of study. Proposers should identify the principal people who worked on past projects and the amount of time they devoted to the work effort.
  - e. Availability of key personnel throughout the project effort.

- f. Ability and commitment to complete the project within the specified time period, meet all deadlines for submitting associated work products, and insure quality control.
  - h. Recognition of work priorities and flexibility to deal with change and contingencies.
2. On the basis of the above evaluation criteria, selected firms submitting proposals may be interviewed prior to the selection of a CONSULTANT. Phone interviews may be made during the week of February 5, 2001, and in-person interviews may be scheduled for the week of February 5, 2001. MAG strongly suggests that the project manager and key members of the CONSULTANT team be present at the interview.
3. The Maricopa Association of Governments reserves the right to:
- a. Cancel this solicitation.
  - b. Reject any and all proposals and re-advertise.
  - c. Select the proposal(s) that, in its judgment, will best meet its needs.
  - d. Negotiate a contract that covers selected parts of a proposal, or a contract that will be interrupted for a period or terminated for lack of funds.



## **ADMINISTRATIVE REQUIREMENTS**

1. During the course of the project, a monthly progress report is required to be submitted within ten (10) working days after the end of each month until the final report is submitted. Each report shall include a comprehensive narrative of the activities performed during the month, an estimated percent complete for each project task, monthly and cumulative costs by task, activities of any subcontractors, payments to any subcontractors, a discussion of any notable issues or problems being addressed, and a discussion of anticipated activities for the next month (See Appendix D for format).
2. MAG shall retain ten percent (10%) of the lump sum amount, withheld from each invoice, as final payment until completion of the project to the satisfaction and acceptance of the work. Final payment shall be made after acceptance of the final product and invoice.
3. An audit examination of the CONSULTANT'S records may be required.
4. The firm that is selected will be required to comply with Titles VI and VII of the Civil Rights Act of 1964. The contractor will comply with Executive Order 11246, entitled Equal Employment Opportunity, as amended by Executive Order 11375 and as supplemented in Department of Labor Regulations (41 CFR Part 60). The contractor will also be required to comply with all applicable laws and regulations of the U.S. Department of Transportation.
5. The firm selected will be required to comply with MAG insurance requirements, which may include: Workmen's Compensation, Architects and Engineers Professional Liability insurance, Comprehensive General Liability insurance, Business Automobile Liability insurance, and Valuable Papers insurance.
6. The firm selected is required to document any potential conflicts of interest during the contract period. A conflict of interest shall be cause for terminating a contract. A potential conflict of interest includes, but is not limited to:
  - a. Accepting an assignment where duty to the client would conflict with the CONSULTANT'S personal interest, or interest of another client.
  - b. Performing work for a client or having an interest which conflicts with this contract.
  - c. Employing personnel who worked for MAG or one of its member agencies within the past three years.
  - d. Performing work under contract or other business arrangements involving the manufacture, marketing, or sale of street sweepers.

MAG will be the final determining body as to whether a conflict of interest exists.

7. The firm that is selected will be required to comply with the MAG Disadvantaged Business Enterprise (DBE) Program requirements. The annual overall DBE goal is 11 percent. See Appendix E for a summary of “MAG’s Key DBE Regulatory Requirements”. A complete copy of MAG’s DBE Program is available on the MAG website at [www.mag.maricopa.gov](http://www.mag.maricopa.gov).

## **APPENDIX A**

### **ARIZONA ADMINISTRATIVE CODE R4-30-301**

## ARTICLE 3. REGULATORY PROVISION

## R4-30-301. Rules of professional conduct:

## A. All registrants shall comply substantially with the following standards of professional conduct:

1. A registrant shall not submit any materially false statements or fail to disclose any material facts requested in connection with his application for certification.
2. A registrant shall not engage in fraud, deceit, misrepresentation, or concealment of material facts in advertising, soliciting, or providing professional services to members of the public.
3. A registrant shall not knowingly sign, stamp, or seal any plans, drawings, blueprints, land surveys, reports, specifications, or other documents not prepared by the registrant or his bona fide employee.
4. A registrant shall not knowingly commit bribery of a public servant as proscribed in A.R.S. 13-2602, or knowingly commit commercial bribery as proscribed in A.R.S. 13-2605, or violate any Federal statute concerning bribery.
5. A registrant shall comply with all Federal, State, and local building, fire, safety, real estate, and mining codes, and any other laws, codes, ordinances, or regulations pertaining to the registrant's professional practice.
6. A registrant shall not violate any State or Federal criminal statute involving fraud, misrepresentation, embezzlement, theft, forgery, or breach of fiduciary duty, where the violation is related to the registrant's professional practice.
7. A registrant shall apply the technical knowledge and skill which would be applied by other qualified registrants who practice the same profession; a contemporary "Manual of Surveying Instructions" issued by the Bureau of Land Management, United States Department of Interior and in effect prior to May 23, 1983 to the extent applicable to that professional engagement.
8. A registrant shall not accept an assignment where the duty to a client or the public would conflict with the registrant's personal interest or the interest of another client without full disclosure of all material facts of the conflict to each person who might be related to or affected by the project or engagement in question.
9. A registrant shall not accept compensation for services related to the same project or professional engagement for more than one party without making full disclosure to all such parties and obtaining the express written consent of all parties involved.

10. Except as provided in Paragraph 11 of this rule, a registrant shall not accept any professional engagement or assignment outside his professional registration unless:

- a. He is qualified by education, technical knowledge, or experience to perform such work, and
- b. Such work is both necessary and incidental to the work of his profession on that specific engagement or assignment.

A registered professional engineer may accept professional engagements or assignments in branches of engineering other than that branch in which he has demonstrated proficiency by registration, but only if he has the education, technical knowledge, or experience to perform such engagements or assignments.

11. Except as otherwise provided by law, code, ordinance, or regulation, a registrant may act as the prime professional for a given project and select collaborating professionals; however, the registrant shall perform only those professional services for which he is qualified by registration to perform and shall seal and sign only the work prepared by him or by his bona fide employee working under his direct supervision.

12. A registrant shall make full disclosure to all parties concerning:

- a. Any transaction involving payments to any person for the purpose of securing a contract, assignment, or engagement, except for actual and substantial technical assistance in preparing the proposal; or
- b. Any monetary, financial, or beneficial interest the registrant may hold in a contracting firm or other entity providing goods or services, other than the registrant's professional services, to a project or engagement.

13. A registrant shall not solicit, receive, or accept compensation from material, equipment, or other product or services suppliers for specifying or endorsing their products, goods, or services to any client or other person without full written disclosure to all parties.

## **APPENDIX B**

### **LABOR COST ALLOCATION BUDGET**

## LABOR COST ALLOCATION BUDGET

## SAMPLE

[illegible][illegible][illegible][illegible]

## **APPENDIX C**

### **PROPOSER'S REGISTRATION FORM**



## PROPOSER'S REGISTRATION FORM

All firms proposing as prime contractors or subcontractors on Maricopa Association of Governments (MAG) projects are required to be registered. **Please complete this form and return it with your proposal.**

If you have any questions about this registration form, please call the Fiscal Services Manager, (602) 254-6300.

### 1. GENERAL INFORMATION:

Name of Firm:

Street Address:  
City, State, ZIP

Mailing Address:  
City, State, ZIP

Telephone Number:  
Fax Number:  
E-mail address:  
Web address:  
Year firm was established:

Check all that apply:

Is this firm a prime consultant?	_____	Identify speciality:	_____
Is this firm a sub-consultant?	_____	If so, by whom?	_____
Is this firm a certified DBE?	_____		

### 2. FINANCIAL INFORMATION

Firm's annual gross receipts (average of last 3 years):

_____	<\$300,000
_____	\$300,000 - \$599,999
_____	\$600,000 - \$999,999
_____	\$1,000,000 - \$4,999,999
_____	>\$5,000,000

Information will be maintained as confidential to the extent allowed by federal and state law. The undersigned swears that the above information is correct. Any material misrepresentation may be grounds for terminating any contract which may be awarded and initiating action under federal and state laws concerning false statements.

\_\_\_\_\_  
Name, Title

\_\_\_\_\_  
Date

## **APPENDIX D**

### **PROGRESS REPORT FORMAT**

(Progress Report Format)

(Consultant's Letterhead)

April 15, 1998

(MAG Project Manager)

(Title)

Maricopa Association of Governments

302 North First Avenue, Suite 300

Phoenix, Arizona 85007

Re: Progress Report No. 3 and Invoice for the Period of March 1998

*For Each Task, the CONSULTANT is to provide the percent of work completed to date, a narrative describing the work accomplished, data obtained, problems encountered, meetings held and reports and/or data produced. It is the responsibility of the CONSULTANT to document that the work accomplished for each task during the reporting period is commensurate with the amount of money billed for the task in the invoice.*

*The narrative describing the work accomplished should be of sufficient detail to enable the project manager to clearly understand the progress on the task during the reporting period. Wherever possible, the CONSULTANT should submit along with the progress report appropriate documentation of work accomplished, such as partial or complete draft technical reports or working papers, etc.*

*The following is a hypothetical example of a progress report:*

**TASK 1 - DATA COLLECTION**

Percent of Work Completed: 100 percent.

Work Accomplished: A database in both hardcopy and electronic format was developed and a methodology for keeping the database current was established.

Data Obtained: Information on the transportation facilities was secured for each of the facilities in the study area. The data included, but was not limited to: name, location, and current and historical traffic levels.

Meetings Held: The following meetings were held in connection with the data collection effort:

March 15, 1998, with the MAG project manager to review data collected for the facilities.

March 21, 1998, with the Advisory Committee to obtain input on the data collection process.

March 23, 1998, with MAG staff to review comments on the preliminary database.

March 25, 1998, with the public and special interest groups to obtain input on the distribution of the database.

Reports or Data Produced: A database in electronic format was produced and provided to MAG staff on March 29, 1998.

## **TASK 2 - INVENTORY**

Percent of Work Completed: 100 percent.

Work Accomplished: A facilities inventory was completed and the data obtained in Task 1 were compiled into a Draft Inventory Technical Report for distribution to the Advisory Committee.

Data Obtained: See Task 1.

Meetings Held: The following meetings were held:

March 1, 1998, met with MAG staff to finalize the outline for the Inventory Technical Report.

March 10, 1998, met with the MAG project manager to obtain suggestions on methods for comparing facility information.

Reports or Data Produced: A draft Inventory Technical Report was produced and distributed to members of the Advisory Committee for review and comment.

## **TASK 3 - FORECASTS**

Percent of Work Completed: 100 percent.

Work Accomplished: Forecasts of travel demand on inventoried facilities were prepared for 2000, 2010 and 2020. The forecasts were consistent with County control totals reviewed by the Advisory Committee last month. The forecasts included a breakdown by facility type.

Data Obtained: See Task 1.

Meetings Held: March 21, 1998, met with MAG staff to discuss comments on preliminary forecast results.

Reports or Data Produced: A draft forecast report was produced and distributed to members of the Advisory Committee for review and comment.

#### **TASK 4 - DEMAND/CAPACITY ANALYSIS AND FACILITY REQUIREMENTS**

Percent of Work Completed: 60 percent.

Work Accomplished: An hourly capacity was computed for each of the inventoried facilities using the Federal guidance provided by MAG staff.

Data Obtained: See Task 1.

Meetings Held: A meeting was held with MAG staff on March 25, 1998 to discuss the differences between capacity calculations for this study versus previous studies.

Reports or Data Produced: None. However, a draft set of hourly capacity estimates, documenting the assumptions and data input used to prepare the estimates, is enclosed.

#### **TASK 5- ALTERNATIVES**

Percent of Work Completed: 25 percent.

Work Accomplished: Other regional plans were examined to determine the type of alternatives that were used to meet future demand.

Data Obtained: Regional plans from San Diego, Los Angeles, Denver, Seattle, Tucson and Chicago were collected.

Meetings Held: On March 18, 1998, a meeting was held with planners from the Pima Association of Governments to discuss alternatives.

Reports or Data Produced: None.

#### **TASK 6 - EVALUATION OF ALTERNATIVES**

Work on this task has not begun.

#### **TASK 7 - RECOMMENDATIONS**

Work on this task has not begun.

#### **TASK 8 - IMPLEMENTATION**

Work on this task has not begun.

Problems Encountered: Some of the capacity calculations prepared for the study were different from those used in previous studies. These differences were discussed and resolved at a meeting with MAG staff on March 25, 1998.

Invoice

The enclosed invoice is for the third progress payment of \$17,679.20. The total amount billed to date is \$48,250.

Sincerely,

Elmer White  
Senior Consultant

Enclosure

cc: Mr. Arnold Black  
Dr. Joseph Brown

## **APPENDIX E**

### **MAG'S KEY DBE REGULATORY REQUIREMENTS**

## **SUMMARY OF MAG'S KEY DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM REQUIREMENTS FOR CONSULTANT CONTRACTS**

**The Disadvantaged Business Enterprise (DBE) requirements in the Code of Federal Regulations Title 49, Part 26 will apply to this contract.** A complete copy of MAG's DBE Program is available on the MAG website at [www.mag.maricopa.gov](http://www.mag.maricopa.gov). Please contact Art Rullo, DBE Liaison Officer, at 602-254-6300 with any questions.

### **DBE Participation Goal and Reporting:**

The DBE participation goal for this contract is 11 percent of the contract award. DBEs used for this contract are required to be certified by the Arizona Department of Transportation or the City of Phoenix prior to the award of the contract. A list of Certified DBE organizations is available at the Civil Rights Office of the Arizona Department of Transportation (602-712-7761) or the City of Phoenix, Equal Opportunity Department (602-262-6790).

The Consultant will be required to report monthly on:

- (1) the utilization of any subcontractors (DBE and Non-DBEs), number of hours worked, and costs incurred; and
- (2) any payments made to subcontractors (DBEs and non-DBEs).

### **Contractor and Subcontractor Assurance:**

MAG will incorporate into each contract it signs with a Prime Contractor, and require in each subcontract (that a Prime Contractor signs with a Subcontractor), the following assurance:

“The Contractor, Subrecipient or Subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of USDOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as MAG deems appropriate.”

### **Prompt Payment Provision:**

“The Prime Contractor will pay Subcontractors for satisfactory performance of contracts no later than fourteen (14) calendar days from the date that the Prime Contractor receives payment from MAG. The Prime Contractor will also return retention payments to the Subcontractor within fourteen (14) calendar days from the date of satisfactory completion of work.”

### **Prime Contractors Shall:**

- Provide the Subcontractor with the name, address and phone number of the person to whom all invoices/billings and statements shall be sent.
- Pay Subcontractors and suppliers within fourteen (14) days of receipt of payment from MAG.



•Stipulate the reason(s) in writing to the subcontractor and to MAG for not abiding by the prompt payment provision. Some possible reasons include:

1. Failure to provide all required documentation
2. Unsatisfactory job performance
3. Disputed work
4. Failure to comply with other material provisions of the contract
5. Third-party claims filed or reasonable evidence that a claim will be filed
6. Reasonable evidence that the contract cannot be completed for the unpaid balance of the contract sum or a reasonable amount for retention.

**Subcontractors Shall:**

1. Submit invoices or billing statements to the Prime Contractor's designated contact person in an appropriate format and in a timely manner. The format and the timing of billing statements shall be specified in the contract(s) between the Prime Contractor and the Subcontractor(s).
2. Notify MAG in writing of any potential violation of the prompt payment provision.

**MAG will implement appropriate mechanisms to ensure compliance with the requirements of all program participants.**

The mechanisms MAG may use, include, but are not limited to:

1. MAG will notify Subcontractors (DBE and Non-DBEs) of the Prime Contractor's responsibility for prompt payment and encourage Subcontractors to notify MAG in writing with any possible violations to the prompt payment mechanism.
2. Withholding payment from Prime Contractors that do not comply with the prompt payment provision noted above, where it has been determined by the MAG DBE Liaison Officer that delay of payment to the Subcontractor is not justified.
3. Stopping work on the contract until compliance issues are resolved.
4. Terminating the contract.